



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

June 9, 2006

REGISTERED MAIL
RB 252 973 909 US

Mr. Robert E. Willis
Chief, Environmental Resource Branch
U.S. Army Corps of Engineers
P O Box 2946
Portland, OR 97208-2946

RE: Second Amendment to Section 401 Water Quality Certification Order No. 03SEAHQ-5603 for the Columbia River Improvement Project

Dear Mr. Willis:

Enclosed is Order No. 03SEAHQ-5603. This is the second amendment of Order No. 03SEAHQ-5603. The purpose of this amendment is to respond to the January 12, 2006, U.S. Army Corps of Engineers (Corps) request for modifications to the 401 Water Quality Certification (WQC) for the Columbia River Channel Improvement Project (CRCIP), issued on June 23, 2003, and amended on June 23, 2005. The Washington Department of Ecology (Ecology) has prepared this amendment to modify conditions regarding smelt spawning area disposal restrictions, and monitoring requirements with associated safety issues as brought to our attention by the Corps.

Ecology would also like to reiterate that the Section 401 Water Quality Certification Order No. 03SEAHQ-5603 to deepen the channel of the Columbia River was based on the 1999 Integrated Feasibility Report for Channel Improvements and Environmental Impact Statement (EIS) and the 2003 Final Supplemental EIS. Therefore, the Corps, with regards to the environmental issues addressed in the Order, has the ability to construct the channel in the manner and to the depths identified and analyzed in those documents.

If you have any questions concerning the content of this document, please call me at 360-407-0271 or Loree Randall, at 360-407-6068.

Sincerely,

A handwritten signature in black ink, reading "Paula Ehlers".

Paula Ehlers, Section Manager
Shorelands and Environmental Assistance Program
Southwest Regional Office

PE:dn
Enclosure



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

IN THE MATTER OF Granting a Water)	Order No. 03SEAHQ-5603
Quality Certification/Modification to:)	SECOND AMENDMENT
Portland District Corps of Engineers)	Deepen the existing navigation channel of
In Accordance with 33 U.S.C 1341)	the lower Columbia River from -40 to -43
[FWPCA § 401], RCW 90.48 and)	feet between river miles 3 to 106.5.
WAC 173-201A)	Disposal of dredged material in flowlane,
)	restoration sites, upland sites and ocean
)	disposal

To: Robert E. Willis
Chief, Environmental Resource Branch
Portland District Corps of Engineers
P.O. Box 2946
Portland, OR 97208-2946

Order No. 03SEAHQ-5603, dated June 23, 2003, and 1st Amendment dated, June 23, 2005, are hereby amended as follows:

1. 1st Amendment Conditions I.E. 1 & 2, III.B.7 and VII.B that reads:

I.E.1. Turbidity shall be measured during in-water dredging and recorded at a minimum every two hours during periods of active dredging from sunrise to sunset. The designated person attending the monitoring equipment shall be responsible for immediately notifying the project foreman of any exceedance of the turbidity standard. Monitoring points shall be 100 feet up stream (representative of background) and at the outer limit of the mixing zone. A turbidimeter is to be used. If measurements taken at the outer limit of the mixing zone show (a) recorded turbidity is greater than 5 NTU over background where the background is less than 50 NTU; or, (b) if more than a 10 percent increase in turbidity when the background turbidity is more than 50 NTU, occurs at the outer limit of the mixing zone, the Corps is required to modify or stop the activity causing the increased turbidity problem and continue to monitor turbidity every two hours. The Corps cannot restart dredging operations until turbidity levels return to below background.

I.E.2. Dissolved oxygen levels shall be measured and recorded at a minimum, every two hours, during periods of active dredging from sunrise to sunset. If dissolved oxygen levels fall below 6.0 mg/l, the Corps is required to modify the activity and continue to monitor every two hours. If dissolved oxygen levels fall below 6.0 mg/l as an instantaneous concentration, work shall stop until dissolved oxygen levels return above 6.0 mg/l. The designated person attending the monitoring

equipment shall be responsible for immediately notifying the project foreman of any exceedance of the dissolved oxygen standard. Monitoring points shall be 100 feet downstream.

III.B.7 The Corps shall monitor turbidity during flowlane disposal activities in the lower river between river miles 3 to 53. Measurements shall be taken and recorded at a minimum of twice a day (one on the flood tide and one on the ebb tide, if such occurs during daylight hours). Above river mile 53 measurements shall be taken and recorded at a minimum of once a day during daylight hours. Monitoring points shall be located a minimum of 100 feet up stream (representative of background) and at the outer limit of the mixing zone.

VII.B During periods of restricted visibility that could cause an unsafe condition, the Corps may postpone the monitoring requirements in conditions I.E.1 & 2 and condition III.B.7. The Corps shall verify through a third party, such as the Coast Guard Watch Stander (360-642-2382) or the National Weather Service web site <http://www.wrh.noaa.gov/> or at the Weather Channel website (<http://www.weather.com/outlook/recreation/outdoors/local/>) that the visibility in the area is considered to be restricted and not safe to monitor. The Corps shall document on the daily monitoring report the cause of what the restrictive visibility was (fog, mist, heavy rainstorm, or any other similar cause), how such cause was verified and the time of day the restricted visibility occurred. Regular monitoring must resume once the visibility increases to safe levels.

Are deleted and replaced as follows:

I.E.1 Monitoring: The Corps shall develop and implement a Water Quality Sampling and Monitoring Plan for dredging and disposal. **The Water Quality Sampling and Monitoring Plan shall be submitted to Ecology for review and approval at least 60 days before dredging and disposal is scheduled to begin.** (An expedited submittal and review of the plan will be coordinated for the dredging season beginning in June 2006.) Ecology may require changes and modifications to the plan. The plan shall include the following minimum requirements:

- a. Locations of samples: Locations of water quality sampling sites shall be identified and described in the plan. At a minimum, sampling shall take place within any visible plumes at the following points:
 - i. Dredging and flowlane disposal activities - Up current (background) and 900 feet downcurrent from the point of discharge (bucket,

cutterhead, or draghead) and no more than 150 feet laterally from the vessel.

- ii. Other disposal activities (upland) - Up current (background) and 300 feet down current from the discharge point.
 - iii. Depth - The Corps shall identify a depth between 10 and 20 feet to collect all the samples.
- b. Number/Timing of samples: Samples shall be collected during daylight hours when dredging and disposal is being conducted as described below:
- i. Active Dredging - once a day during a flood tide and once a day during an ebb tide.
 - ii. Flowlane Disposal - once a day during a flood tide and once a day during an ebb tide during a disposal activity.
 - iii. Upland Disposal -- For each disposal event, every two hours on the first day of discharge and then every four hours thereafter until discharge ceases.
 - iv. Background turbidity in NTU, location, tidal stage, and time must be recorded prior to monitoring downcurrent.
- c. Parameters to be sampled: The following parameters shall be monitored:
- i. Turbidity during dredging and disposal anywhere that active dredging and disposal is occurring.
 - ii. Dissolved Oxygen shall be monitored during active dredging of the following areas outside the bounds of the 600-foot wide navigation channel: side channels and the outside edges of the authorized 100-foot wide overwidth where sloughing may occur.
- d. Compliance:
- i. Turbidity must be measured and recorded as described above during periods of active dredging, disposal, and dewatering of upland facilities during daylight hours. Results should be compared to the background sample taken during that monitoring event. If a 5 NTU or greater exceedance over the background level occurs at a compliance point in the plume within Washington waters, modify the activity and continue to monitor at two hour intervals. If a 5 NTU or greater exceedance over the background level continues after the second

monitoring interval, the Corps shall modify the activity until the turbidity levels return to background.

- ii. If dissolved oxygen levels are measured below 6.5 mg/l, the activity should be modified and monitoring frequency shall increase. If the level of dissolved oxygen falls below 6.0 mg/l, the activity must be stopped until the levels return above 6.0 mg/l.
- e. Equipment: Sampling for turbidity and dissolved oxygen is to be accomplished using a turbidimeter and a dissolved oxygen meter which are properly and regularly calibrated according to the operator's manual. Quality assurance and control procedures, as well as accuracy of the instrument, shall be identified in the Water Quality Sampling and Monitoring Plan.
- f. Reporting: During the dredging season the Corps shall submit monthly monitoring reports to Ecology. The monthly reports should include:
 - i. monitoring locations;
 - ii. background levels of turbidity and dissolved oxygen (when applicable);
 - iii. turbidity measurements at required intervals and depths;
 - iv. dissolved oxygen levels at required intervals and depths (when applicable);
 - v. when/if the activity is modified or stopped as a result of exceedances of levels of turbidity and/or dissolved oxygen;
 - vi. what actions were taken to modify the activities if the turbidity or dissolved oxygen levels were exceeded and/or how long the activity was stopped;
 - vii. what BMPs were used to bring the levels into compliance; and,
 - viii. when the activity began again.
- g. Annual Report: The Corps shall compile and submit an annual report to Ecology no more than 90 days after the dredging season ends. The annual report shall include:
 - i. locations dredging occurred;
 - ii. amounts of material dredged in all locations;

- iii. disposal locations;
- iv. summary of turbidity monitoring, including exceedances;
- v. descriptions of upland disposal locations during operations, including BMPs employed and effectiveness of those BMPs; and,
- vi. summary of results from dissolved oxygen monitoring.

h. Restricted Visibility: During periods of restricted visibility that could cause an unsafe condition, the Corps may postpone required turbidity and dissolved oxygen compliance monitoring until conditions improve if confirmation is made by a third party, such as the Coast Guard Watch Stander or the National Weather Service, that the visibility in the area to be monitored is considered to be restricted and is unsafe to conduct the required monitoring. If monitoring is postponed due to restricted visibility and unsafe conditions, the weather condition (fog, mist, heavy rainstorm, etc.) time of determination and verification route must be recorded. Regular monitoring must resume once the visibility resumes to safe levels.

2. Order No 03SEAHQ-5603 Conditions V.D 2 that reads:

V.D.2. In-water disposal shall not occur during the period of peak Eulachon outmigration (between the 8th and 20th weeks of the year) downstream from the identified spawning areas (CRM 35 – CRM 75). If in-water disposal is essential during the period of peak outmigration, then the Corps shall further study the potential for Eulachon losses as a result of dredged material disposal impacts. Appropriate mitigation measures shall be developed based on the study outcomes, as determined through the adaptive management process required under Condition IV A.

Is deleted and replaced as follows:

V.D.2. In-water disposal shall not occur during the period of peak Eulachon outmigration (between the 8th and 20th weeks of the year) in identified spawning areas (between CRM 35 and CRM 75). If in-water disposal is essential during the period of peak outmigration, then the Corps shall further study the potential for Eulachon losses as a result of dredged material disposal impacts. Appropriate mitigation measures shall be developed based on the study outcomes, as determined through the adaptive management process required under Condition IV A.

No other condition or requirement of Order No. 03SEAHQ-5603 dated June 23, 2003, and 1st Amendment dated, June 23, 2005, are hereby affected by this amendment.

You have the right to appeal this amendment to the Pollution Control Hearings Board. Pursuant to chapter 43.21B RCW, your appeal must be filed with the Pollution Control Hearings Board, and served on the Department of Ecology, within thirty (30) days of the date of your receipt of this document.

To appeal this amendment, your notice of appeal must contain a copy of the Ecology amendment you are appealing.

Your appeal must be filed with:

The Pollution Control Hearings Board
4224 - 6th Avenue SE, Rowe Six, Bldg. 2
P.O. Box 40903
Lacey, Washington 98504-0903

Your appeal must also be served on:

The Department of Ecology
Appeals Coordinator
P.O. Box 47608
Olympia, Washington 98504-7608

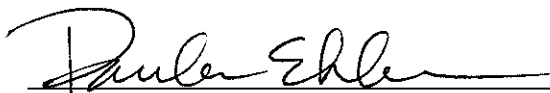
In addition, please send a copy of your appeal to:

Loree' Randall
Department of Ecology
P.O. Box 47600
Olympia, Washington 98504-7600

For additional information Environmental Hearings Office Website: <http://www.eho.wa.gov>

Your appeal alone will not stay the effectiveness of this Order. Stay requests must be submitted in accordance with RCW 43.21B.320. These procedures are consistent with Ch. 43.21B RCW.

DATED this 9th day of June, 200 6 at Lacey, Washington



Paula Ehlers, Section Manager
Shorelands and Environmental Assistance Program
Department of Ecology – Southwest Regional Office